

FIG. 1

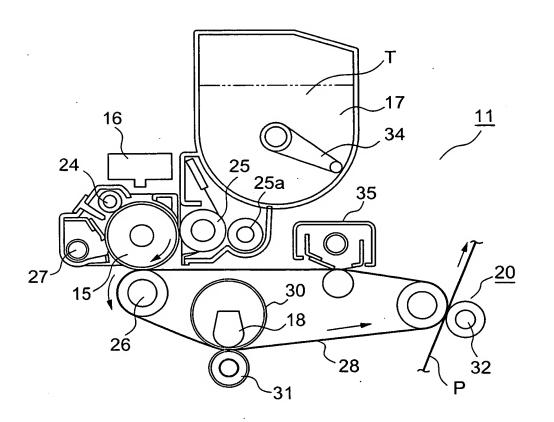


FIG. 2

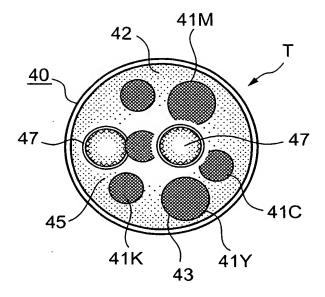


FIG. 3

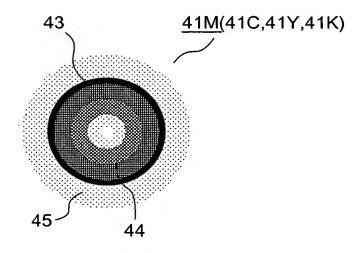
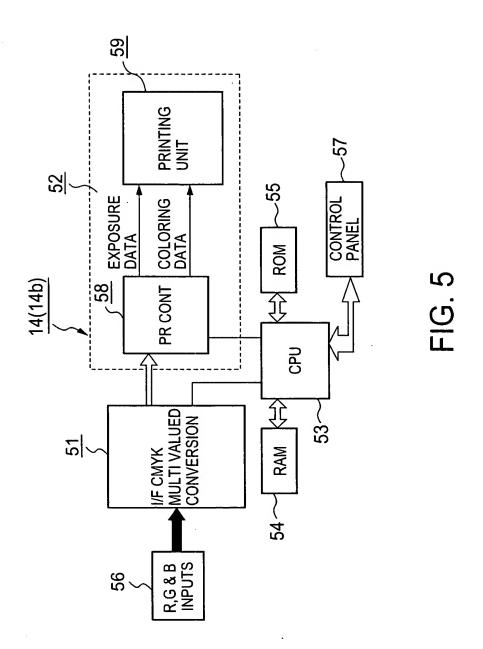


FIG. 4



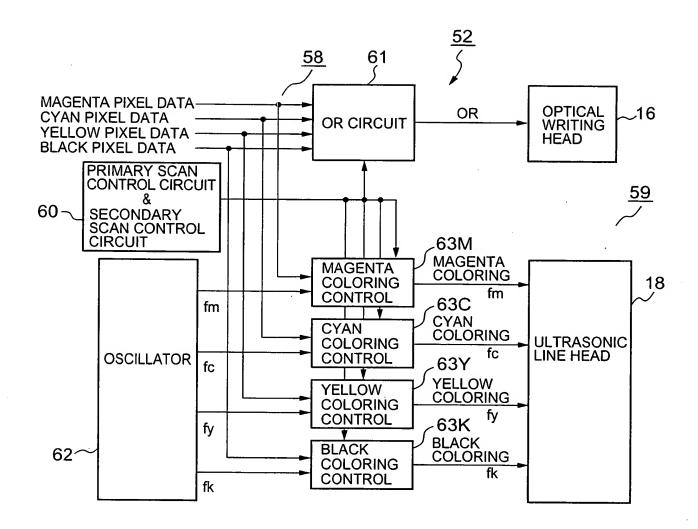


FIG. 6

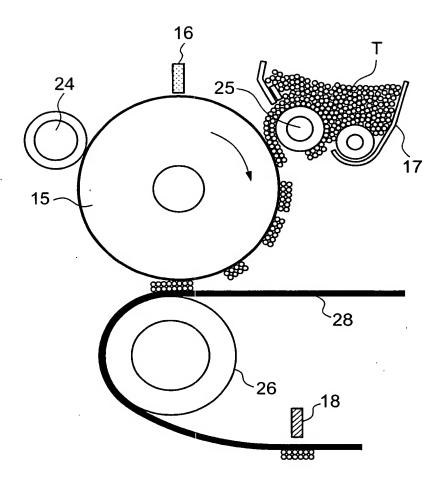
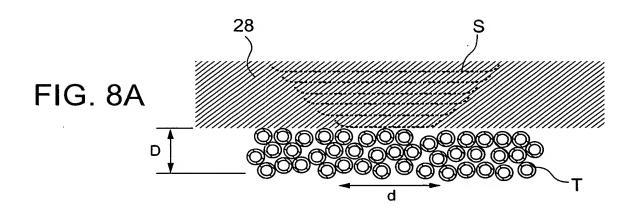


FIG. 7





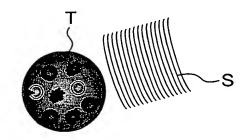
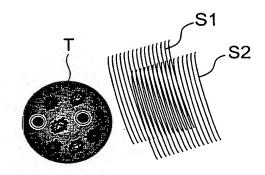
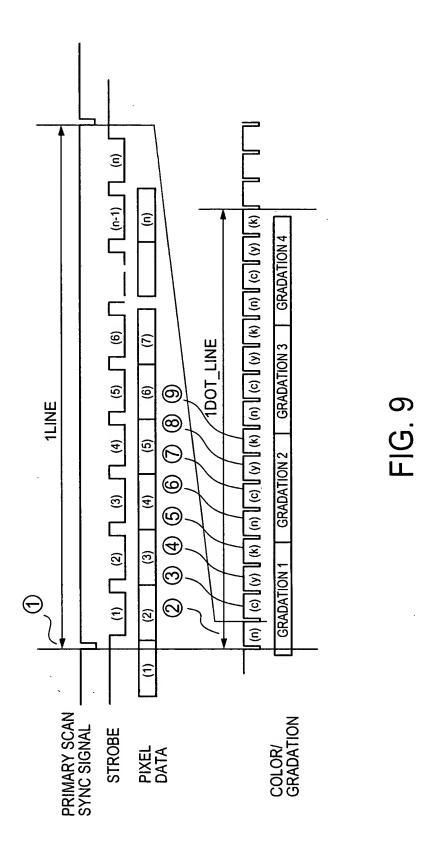
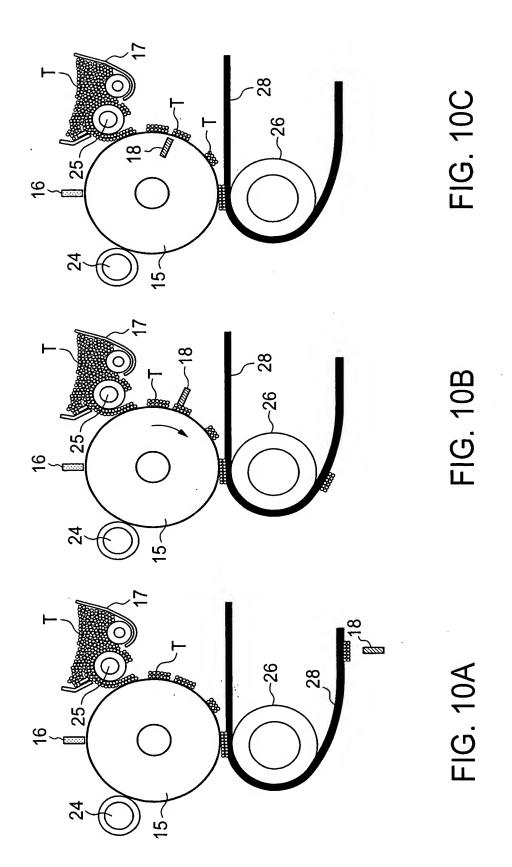


FIG. 8C







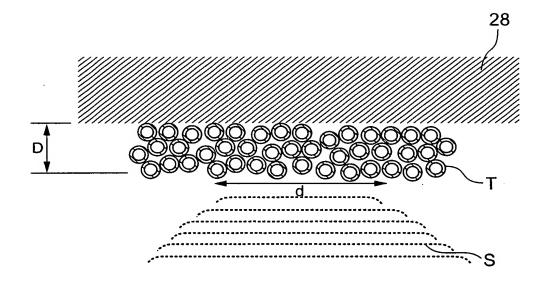


FIG. 11

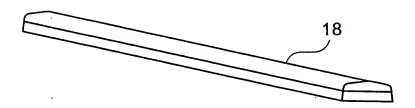
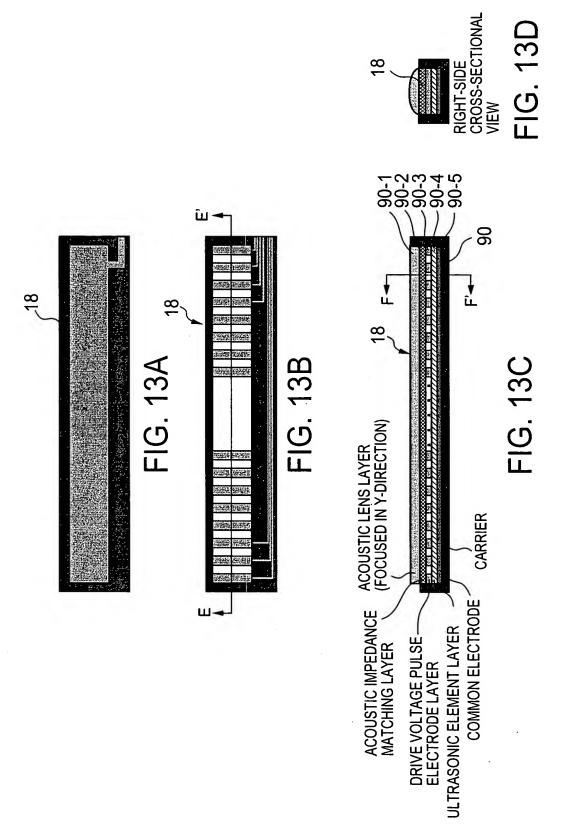
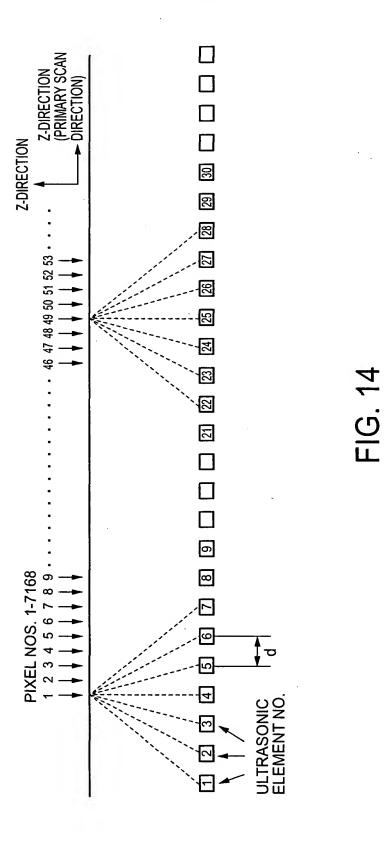


FIG. 12





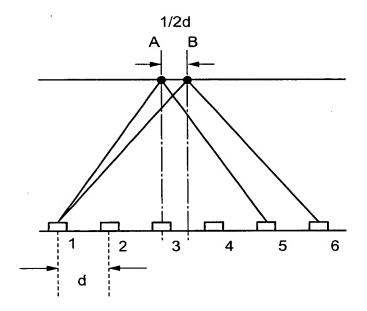
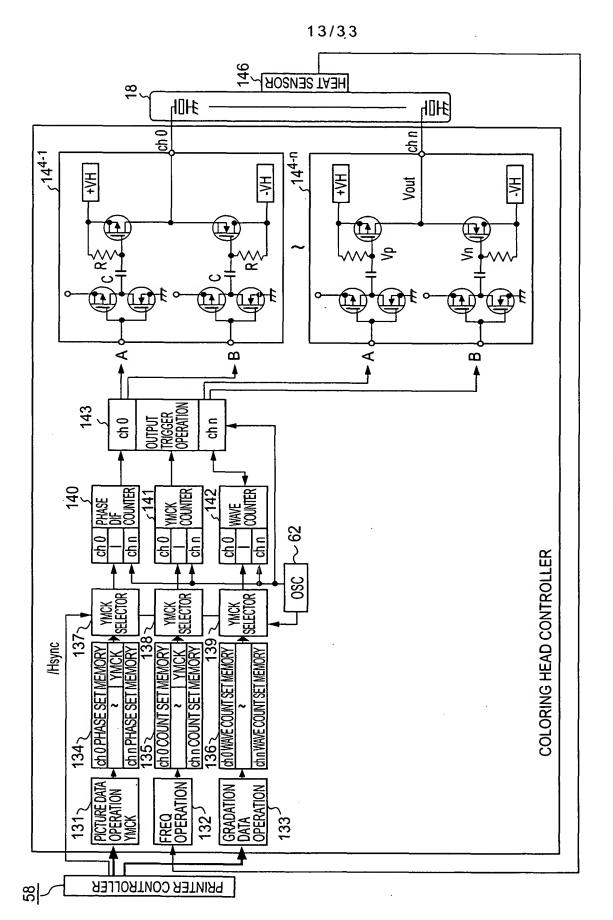
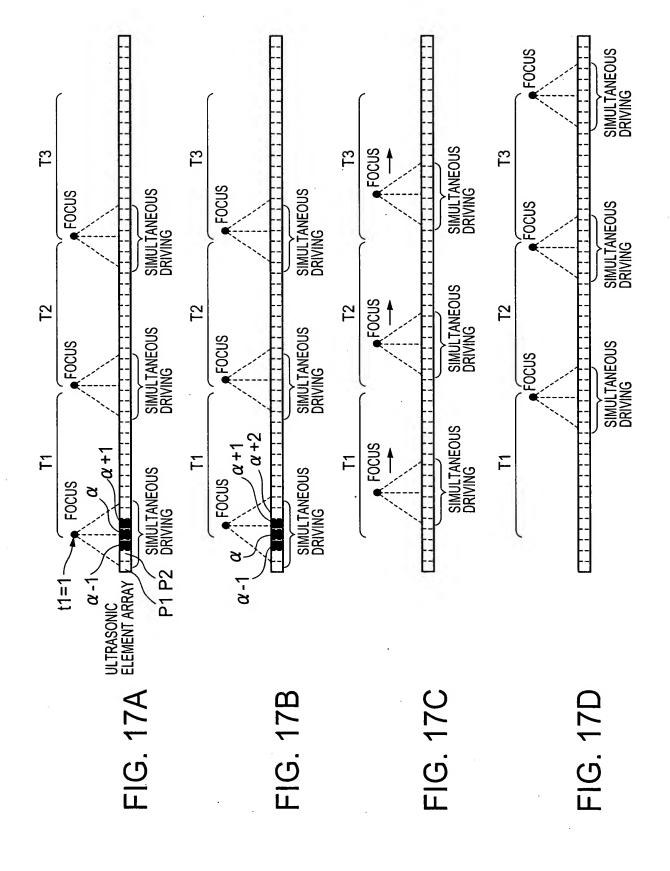


FIG. 15





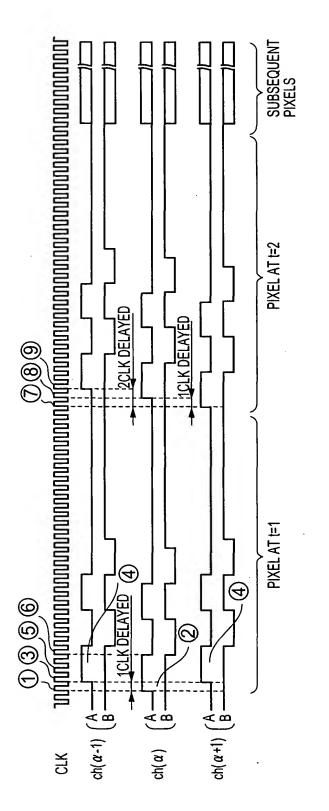
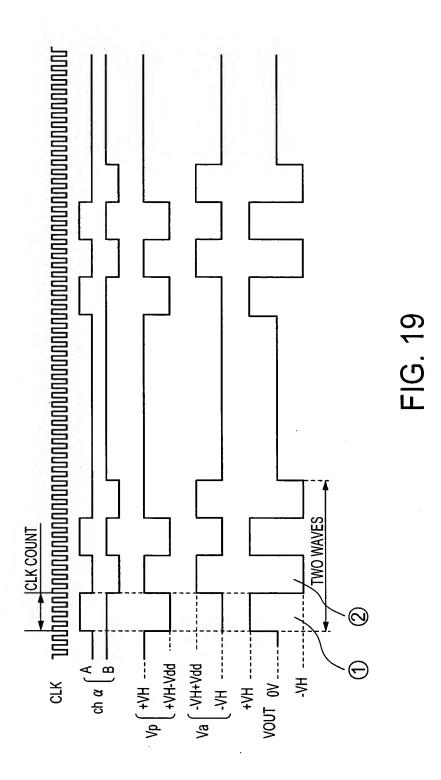


FIG. 18



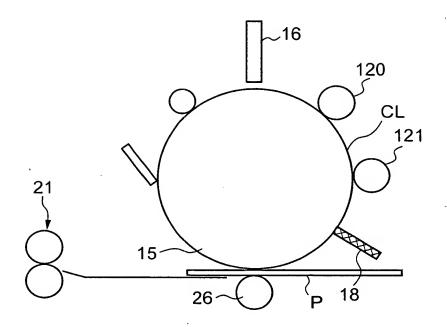


FIG. 20

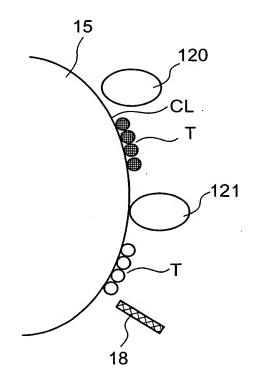


FIG. 21

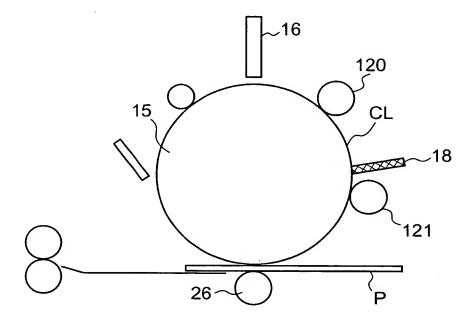


FIG. 22

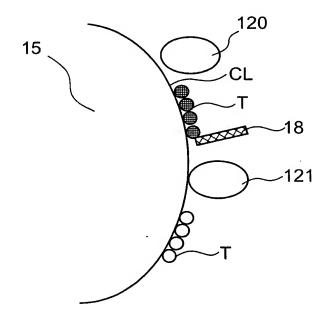
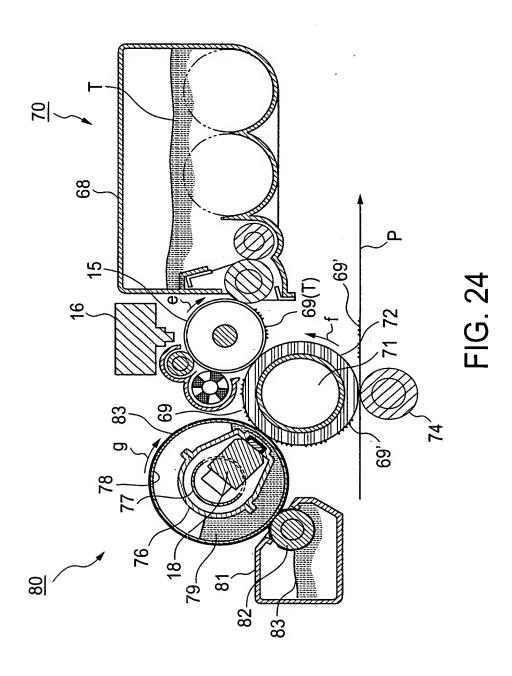


FIG. 23



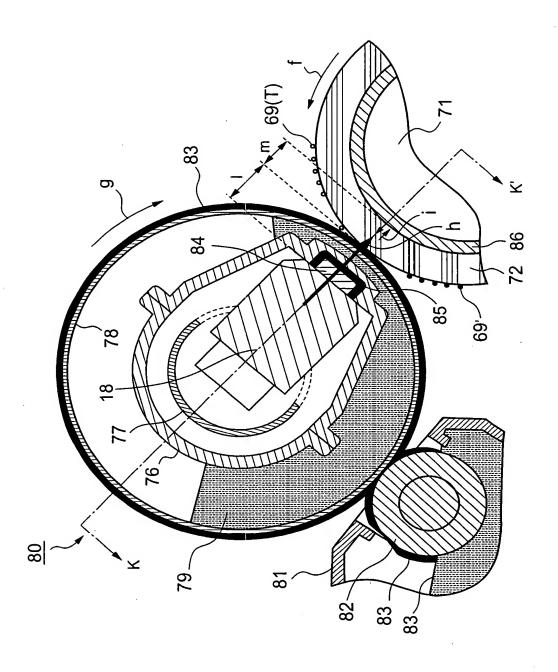


FIG. 25

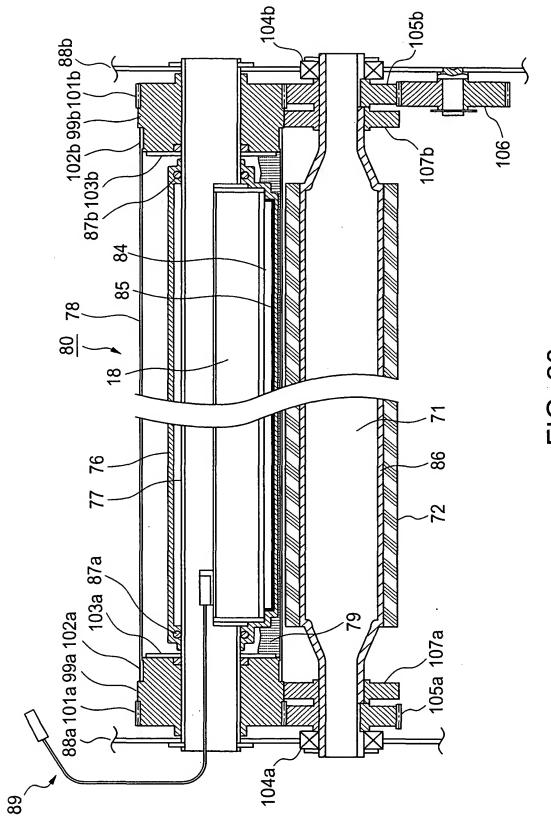


FIG. 26

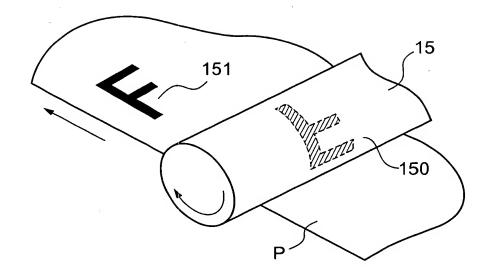


FIG. 27

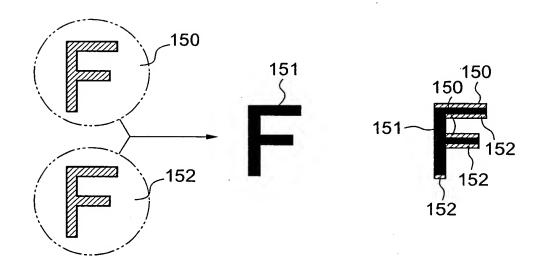


FIG. 28A

FIG. 28B FIG. 28C

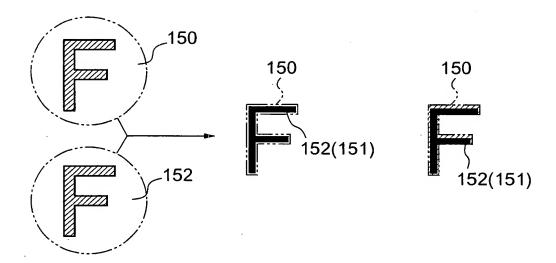


FIG. 29A FIG. 29B FIG. 29C

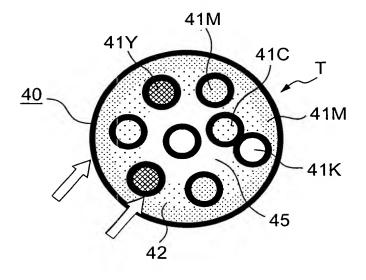
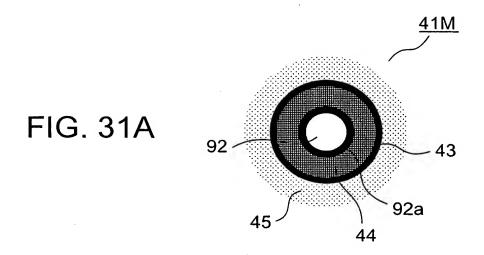
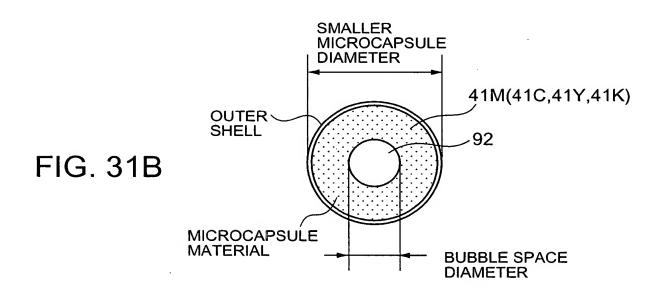


FIG. 30





AIR-BUBBLE CONTAINING SMALLER MICROCAPSULE'S VIBRATING AMPLITUDE-FREQUENCY CHARACTERISTIC

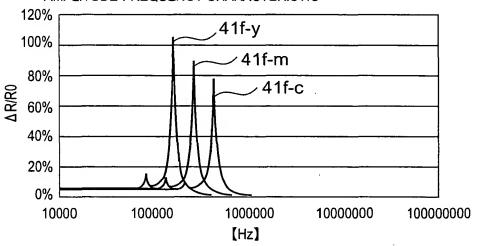


FIG. 32

AIR-BUBBLE CONTAINING SMALLER MICROCAPSULE'S VIBRATING AMPLITUDE-FREQUENCY CHARACTERISTIC

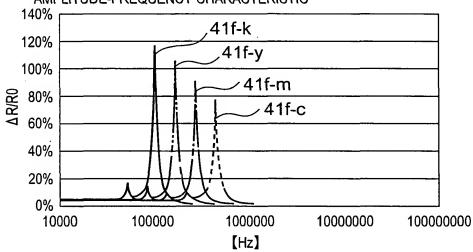


FIG. 33

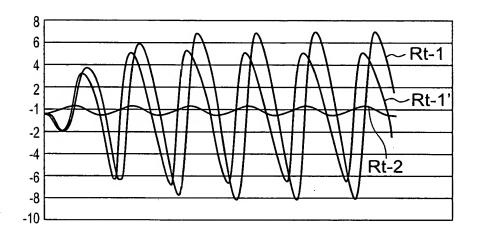


FIG. 34

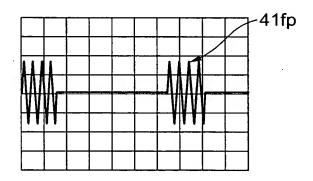


FIG. 35

	MAGENTA CAPSULE	CYAN CAPSULE	YELLOW CAPSULE
CAPSULE RADIUS Ro	1.0 <i>μ</i> m	1.0 μm	1.5 <i>µ</i> m ∘
SHELL PARAMETER Sp	0.5	2	0.5
MAX AMPLITUDE FREQ f	7.0MHz	11MHz	4.0MHz

FIG. 36

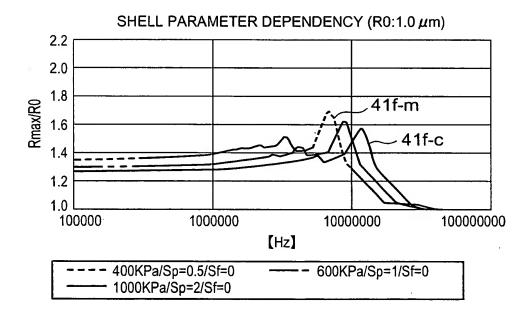


FIG. 37

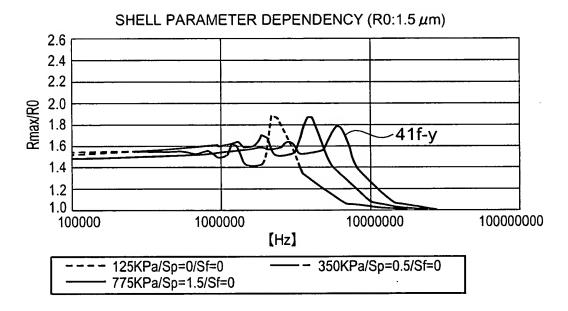


FIG. 38

(Ro,Sp)- FREQUENCY CHARACTERISTIC

	MAGENTA CAPSULE	CYAN CAPSULE	YELLOW CAPSULE	BLACK CAPSULE
CAPSULE RADIUS Ro	1.0 μm	1.0 μm	1.5 μm	0.5 μm
SHELL PARAMETER Sp	1	0.5	1.5	2.0
MAX AMPLITUDE FREQ f	9.0MHz	18MHz	6.0MHz	30MHz

FIG. 39

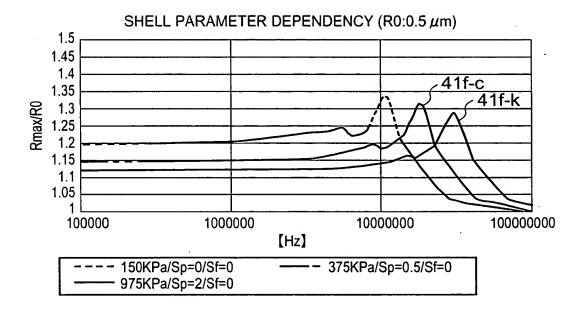


FIG. 40

(Ro,Sp,P)- FREQUENCY CHARACTERISTIC

	YELLOW CAPSULE	MAGENTA CAPSULE	CYAN CAPSULE
CAPSULE RADIUS Ro	2.0 μm	1.5 μm	1.0 μm
SHELL PARAMETER Sp	0	0	0
APPLIED ULTRASONIC PRESSURE P	70kPa	90kPa	130kPa
MAX AMPLITUDE FREQ f	1.6MHz	2.2MHz	3.5MHz

FIG. 41

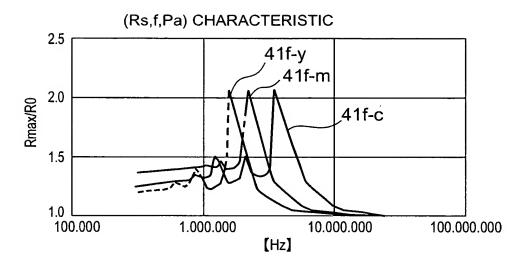


FIG. 42

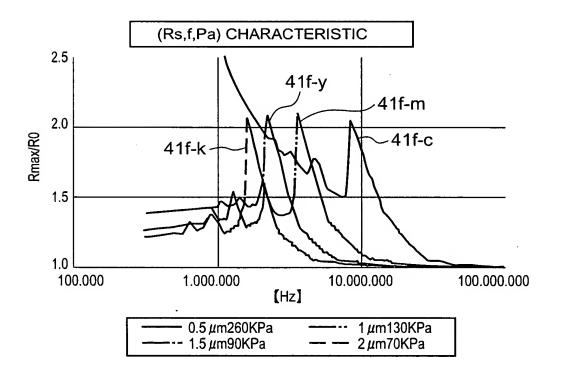


FIG. 43

31/33 (Ro,Sp,P)- FREQUENCY CHARACTERISTIC

	YELLOW CAPSULE	MAGENTA CAPSULE	CYAN CAPSULE	BLACK CAPSULE
CAPSULE RADIUS Ro	1.5 μm	1.0 μm	0.5 μm	2.0 μm
SHELL PARAMETER Sp	0	0	0	0
APPLIED ULTRASONIC PRESSURE P	90kPa	130kPa	260kPa	70kPa
MAX AMPLITUDE FREQ f	2.2MHz	3.5MHz	8.3MHz	1.6MHz

FIG. 44

(Ro,Sp,P)- FREQUENCY CHARACTERISTIC

	YELLOW CAPSULE	MAGENTA CAPSULE	CYAN CAPSULE
CAPSULE RADIUS Ro	1.0 µm	0.5 μm	0.5 μm
SHELL PARAMETER Sp	2.0	0.5	. 0.5
APPLIED ULTRASONIC PRESSURE P	1000kPa	375kPa	975kPa
MAX AMPLITUDE FREQ f	12MHz	18MHz	30MHz

FIG. 45

(Ro,Sp,P)- FREQUENCY CHARACTERISTIC

	YELLOW CAPSULE	MAGENTA CAPSULE	CYAN CAPSULE	BLACK CAPSULE
CAPSULE RADIUS Ro	1.0 μm	0.5 μm	0.5 μm	1.0 μm
SHELL PARAMETER Sp	2.0	0.5	2.0	0.5
APPLIED ULTRASONIC PRESSURE P	1000kPa	375kPa	975kPa	400kPa
MAX AMPLITUDE FREQ f	12MHz	18MHz	30MHz	7MHz

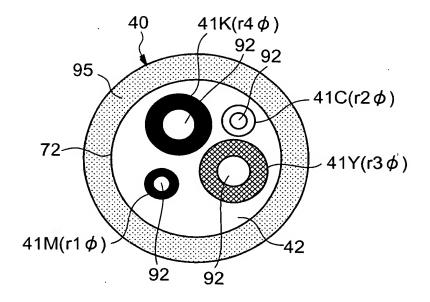


FIG. 47A

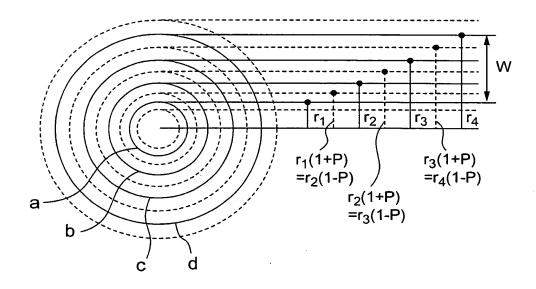


FIG. 47B

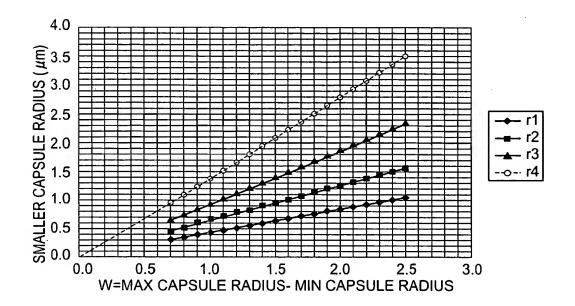


FIG. 48

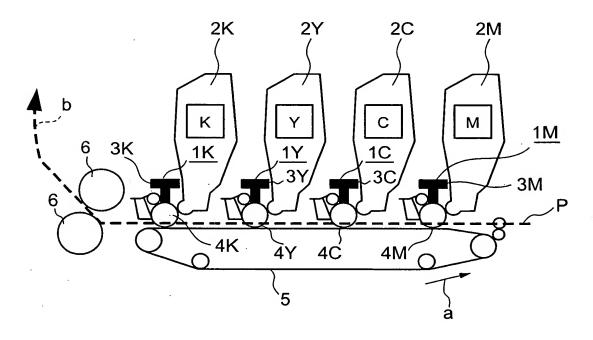


FIG. 49 (PRIOR ART)